posite to the dorsal series is another row of small rhomboidal or sometimes triangular brown blotches on each side; they involve 4 to 6 scales and extend from the second to the fifth lateral row of scales, and are bordered by light lines like the dorsal series, from which they are separated by a single scale. Indications are seen of another series of small blotches resting directly upon the abdominal scutellæ, alternating with and a little lower than the first lateral series. The abdomen is whitish yellow without distinct blotches. A light line from posterior angle of superciliary and orbit to angle of jaw above labials, and another from before the eye to labials. The markings of the head of this species seem to be very nearly the same as in C. lucifer, there is, however, indication of a light border to the external edge of the superciliary, and the rostral and entire space in front of the nostril and pit as well as a little posterior to these, is as dark as the crown, while in C. lucifer they are distinctly lighter.

Though this species so closely resembles C. lucifer, it will be distinguished by the dorsal rhomboids with perfect lateral angles, by the narrower and more irregular rings posteriorly, by the lighter colors generally, by the slender rattle, and by the depressed nose with the difference in the frontals, and the larger, flatter, and smoother scales behind these. From C. atroxit will at once be distinguished by the very different markings of the head. It differs from C. tigris in having the head wider behind and the muzzle narrower, position of the frontals, narrower dorsal scales, and number of rows, larger dorsal

blotches, etc.

## Notes and Descriptions of ANOLES.

## BY E. D. COPE.

Preliminary to a more extended memoir on the Anoline Iguanidæ, the following contribution is offered to Naturalists.

Xiphosurus velifer Gray. Inhabits the Island of Vieques.

Xiphosurus cristatellus  ${\it Gray}$ . Very abundant on the Island of St-Thomas.

Anolis distich us Cope.

Size small, form robust. Head broad, muzzle short. Tail one and a quarter times the length of the body, compressed, not verticillate, with an irregular serrate crest. Dorsal and lateral scales equal, homogeneous, minute, granular, larger than the ventral; the latter ovate, smooth. Humeral and superior antibrachial scales equal to the dorsal; those on the anterior part of the forearm larger. Anterior femoral and tibial scales equal to the ventral; those of the superior surfaces equal to the dorsal. Toes not of the most elongate type, reaching the external auricular opening or the posterior border of the orbit, where the limb is extended. No nuchal or dorsal dermal fold. Occipital plate subcircular, rarely in contact with the superciliaries, sometimes transversely divided. Superciliaries five to seven on each side, sometimes in contact, sometimes separated by a row of minute scales. Palpebrals three to eight, smooth. Facial ruga but little developed; interrugal space but little concave, covered with a few small, smooth scales. A straight median suture divides the plates of the anterior two-thirds of the muzzle; the latter arranged in four or five pairs, the smallest in contact with the rostral shield, the largest separated from the anterior superciliary by a large polygonal plate, and from the series of the canthus rostralis by a similar one, and in contact with it. Canthus rostralis straight, falling below the plane of the muzzle. Loreal series four. Superior labials seven. First infralabial smaller than first inferior labial or mental, its longitudinal extent greater than the transverse; the two succeeding

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similar to it—all in contact with the inferior labials. Goitre moderate. Length of head and body 1 in. 9 lin., from shoulders to vent 1 in. 2 l., tail 2 in.

Above brown, the head darker; nape and extremitics faintly vermiculated; tail indistinctly spotted laterally and superiorly. Some specimens with dark shadings at the angle of the jaws, near the auricular openings, and on the sides. Goitre, vent, inferior surfaces of femora and base of tail, light yellow.

Habitat.-New Providence Islands. Bahamas.

This species appears to be quite distinct. It resembles in its proportions the young of Xiphosurus cristatellus. Specimens have been obtained by my friend Mr. H. C. Wood, Jr., and are in the Academy and Smithsoniau Museums.

Anolis striatulus Cope.

Size small; form elongate. Head rather elongate, depressed, much as in A. alligator Dum. Bibr. Tail once and two-thirds the leugth of the body, moderately compressed, weakly verticillate, irregularly serrate. No dorsal dermal fold; an imperfect fold upon the nape, where two or three rows of scales appear to be a little larger than those upon the dorsal and lateral regious of the body. Anterior femoral and antibrachial scales large, smooth, similar to those of the belly. Superior humeral, antibrachial, femoral and tibial similar to those of the back. Occipital shield separated from the superciliaries by small scales; the latter usually in contact medially, four or five in number upon each side. Palpebral disc rather round in outline, composed of nine smooth scales. Facial rugæ weak, soon obsolete, covered by three scales anterior to the last superciliary. The space between these as far as the end of the muzzle, covered with small smooth scales. Rostral plate bordered by five scales, the median one fitting into an emargination between two mucronations. Nostrils lateral. Canthus rostralis slightly concave, very obtuse anteriorly. Superior labials eight. Loreal rows five. Anterior half of inferior labials in contact with an inferior series of plates, which are louger than broad, the anterior smaller than the first inferior labial. Goitre rather large. Two or three small plates behind the vent; scales at the base of the tail smooth. Extended posterior extremity not reaching beyond the posterior border of orbit. Total length 4 in. 7 lin.; tail 2 in. 11 lin.; head from shoulder 8 lin.

From alcoholic specimens it appears that the color is greeuish gray above, with very numerous darker marblings. The head and chin are darker. The medial dorsal line is crossed by four deep brown spots bordered with white. The anterior of these, on the interscapular region, is narrow and more transverse. There is a fifth spot at the base of the tail. The latter is clouded with brown superiorly, and the extremities are cross-barred with the same. Thighs dark, varied posteriorly. Goitre red-orange, abdomen greenish, femora and

vent golden.

The female (preserved in spirits) only differs in being smaller.

The Academy's Museum possesses this species from Mr. R. Swift, and the Smithsonian's from Mr. Rüse; a specimen has also been loaned me by Mr. Theodorc Gill. They were all obtained in the Island of St. Thomas, W. I. The name is a diminutive of *stratus*, saddled.

Anolis a cutus Hallowell, Proc. Acad. Nat. Sci. Philada, 1856, 228. The locality, "Cuba," assigned by Dr. Hallowell to this species with doubt, is probably incorrect. It has been recently sent from Santa Cruz, W. I., to the Smithsonian Institute by Mr. A. H. Rüse, and is also in the Academy's Museum. An excellent description of it has been recently published by Dr. A. Günther, in the Annals and Magazine of Natural History, 1859, p. 212, under the name of Anolis Newtoni. The specimens described were from Santa Cruz.

Anolis maculatus *Gray*, Catal. Liz. Brit. Mus. 203. The habitat not indicated. Dr. Gray's description of this species leaves much to be desired. Several of the numerous specimens of females before us so coincide with the

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same author's description of A. lineatopus, that we cannot avoid suspecting the latter name to be a synonym. The species is alluded to by Mr. Gosse in the Naturalist's Sojourn in Jamaica, p. 225. The identification of this, and of the A. opalinus of the same author, would have been much facilitated by the introduction into the description of the latter, of the characters which best distinguish species from species in this genus. The following may supply

some deficiencies:

The head is rather large, and swollen round the occiput, so that the occipital plate is in a deep depression. The latter is small and separated from those of the superciliary ridges by numerous small scales. The canthus rostralis is very prominent and acute, nearly straight. There is a well marked depression between them and the facial rugæ. The latter are acute, circumscribe an oval depression containing three or four longitudinal series of keeled scales, and converge upon the muzzle before disappearing. Nine to eleven palpebrals, all keeled. The loreal rows are six; superior labials eight, inferior ten. Two anterior infralabials narrow, half the size of first inferior labials, larger than those that follow, which are in three or four rows. There is a distinct nuchal dermal fold; about six dorsal rows of faintly keeled scales, larger than the lateral. Superior brachial and pedal scales, and anterior antibrachial and femoral, strongly keeled. Tail crest slight, verticils not very marked. The hind leg extended will not reach beyond the anterior part of the orbit-often falling more or less short of it. The color that alcoholic specimens present is a pale yellowish brown, with indistinct transverse brown markings on the upper surfaces of the body, limbs and jaws. We can count five or six of these transverse bands on the side between the axilla and groin; they are here often crossed by a narrow light band proceeding from the shoulder, mostly obsolete posteriorly. Goitre unspotted, pale orange in life, according to Mr. Gosse; the toes are of the slender type. From the muzzle to the vent measures about two inches nine lines; from the latter point to the end of the tail 5 in. 5 lin.

The males of A. opalinus Gosse are smaller. The median dorsal rows are less noticeably larger than the lateral, and are fewer in number. The front is nearly plain, from the disappearance of the facial ruge. The ventral plates are smooth; the superciliary plates are either in contact, or separated by one row of scales, never by two, as is usually the case in maculatus. In none of our specimens do the dark markings arrange themselves into transverse bands, as in the latter, and the lateral pale stripe is much more con-

spicuous.

In the female of A, maculatus the length from the muzzle to the vent is 1 in. 8 lines; the tail 3 in. The dorsal region is pale, forming a more or less distinct band; there are two narrower bands on each side, more or less inter-

rupted, often indistinct.

Numerous specimens of this species are in the Museums of the Smithsonian Institute and Academy of Natural Sciences, which were sent to the former from Jamaica by Mr. C. B. Adams.

Anolis i o durus Gosse, Ann. Mag. Nat. Hist. 1850, 344. Inhabits Jamaica. The ventral plates in this species are usually smooth; they are sometimes cari-Specimens exhibiting the latter structure have been described by Dr. Hallowell as A. punctatissimus, Proc. Acad. Nat. Sci. Phil. 1856, 225. This description will prove valuable to those who have to depend on that of Mr. Gosse, who gives too few of the essential characters for it to be readily recognized. The A. heterolepis of Dr. Hallowell, op. cit. p. 230, is the female, the locality "Cuba" being probably erroneous. Numerous specimens are in the Museums of the Academy and of the Smithsonian Institute, those in the latter received from Mr. C. B. Adams, (Nos. 5756, 5758).)

Anolis (Dracontura) lionotus Cope.

Neck and extremities long; head short, broad, elevated posteriorly, concave

in profile. Nostrils lateral; scales of the middle and extremity of the mnzzle small, numerons. Occipital elongate oval, not in contact with the superciliaries. The latter, four on each side, separated on the medial frontal line (which is concave), by a series of very small scales. Facial rugæ almost obsolete, enclosing an ovoid concavity, broader anteriorly, which is occupied by elongate smooth scales. Three or four palpebrals of large size, surrounded by several smaller plates, some of them weakly keeled. Canthus rostralis short; loreal scales in eight series. Superior labials eight. One large symphyseal scarcely divided; no larger series ("infralabials") beneath the inferior labials. Goitre moderate. Scales of the sides small, not keeled; of the belly larger, smooth; of the back still larger, in about twelverows, smooth; no dorsal or unchal crest. Tail stont at the base, compressed, the median superior scales flat, offering no rudiment of a crest. Digital expansions narrow. Anterior extremity reaching to the groin; the posterior, to the nostril, when extended forward. The scales of the upper surfaces of the extremities, moderate, flat, weakly keeled.

General color above, bronze brown, with a few darker shades on the dorsal region. Tail and hinder extremities paler, femora light spotted behind. A light band extends from the angle of the mouth to the middle of the side. Beneath it there are brown vermiculations, which become darker near the groin. Belly immaculate; lips dark.

One specimen in the Museum of the Academy, sent from Cocuyas de Vera-

gnas, New Grenada, by Mr. R. W. Mitchell.

Anolis (Dracontura) c y a n o p l e u r n s Cope.

Size small; form very slender. Head elongate, facial rngæ weak, converging anteriorly above the plane of the canthns, enclosing an elongate concavity. Series of superciliary plates not in contact medially, and separated from the occipital—all tricarinate. Scales of the muzzle smaller, tricarinate. Two or three tricarinate palpebrals; six loreal rows. Upper labials six or seven; infralabials small, keeled. Six dorsal rows of more or less hexagonal plates, smooth or tricarinate, equal to or larger than those of the belly, which latter are strongly keeled. Scales of the sides small. Scales of the upper surfaces of the extremities flat, keeled. Tail three times the length of the body, slightly compressed, the scales of its median line similar to those of its sides, keeled. The posterior extremity extended reaches the middle of the frenal region. Digital dilatations narrow. Total length 5 in. 6 lin.; tail 4 in. 2 lin.

Under surface of head, body, extremities and base of tail, golden greenish yellow; a broad dorsal band of the same, involving only the six rows of large scales. This band divides npon the nape, sending a narrow line to the posterior border of each orbit. Occiput and sides deep blue, the latter darker near the dorsal band, where it is sometimes marked with a longitudinal series of golden dots. The muzzle and side of the head are dark blnish or blackish; in the males the goitre is large, and, with the abdomen, of a pale bluish tint—not golden, as in the female. In the former, the posterior extremities are marked with a few light cross bars; in the latter the femora have an additional

light posterior border.

The specimens described were found at Monte Verde, Cuba, and sent to the Smithsonian Institute, by Mr. C. Wright, (Type No. 5737.) Some of them have been presented to the Academy's Museum. The species is one of the most elegant and brilliant of the charming little group designated by some authors, as it appears to me without sufficient reason, as a genus, under the name of Dracontura.

Anolis (Dracontura) ophiolepis Cope.

Size small; tail less than twice the length of the body. Occipital plate not in contact with the superciliaries; the latter, four on each side, the two anterior largest, equal, not separated from the palpebral disc by small scales, in 1861.

contact medially, or more usually separated by a series of narrow scales. Palpebrals about six in each disc, weakly keeled. Scales of the muzzle unicarinate; facial rugæ not very prominent, much raised above the plane of the canthus rostralis, enclosing a very shallow concavity. Superior labials four or five; first pair of inferior labials ("mentals") large; infralabials small, elongate. Goitre small. Scales of the sides granular; scales of the belly, tail, extremities and from thirteen to seventeen dorsal rows, elongate, strongly carinate. Digital expansions narrow. Anterior extremity not reaching the groin, the posterior reaching the middle of the orbit. Length of head and body 1 in. 5 lin.; of tail, about 2 in., (mutilated.)

The under surfaces are yellowish, unspotted. Above, the ground color is golden olivaceous in the males, in the females golden brown. There is a slight median dorsal line extending to the sacral region; another similar one extends from the superior posterior part of the orbit upon the anterior part of the tail, and a third from the posterior superior labials, through the tympanic orifice, upon the base of the tail. The superior lateral band is bordered above by a

deep brown band.

Specimens (No. 5732) in the Smithsonian Institute from Monte Verde, Cuba,

from Mr. Charles Wright, and in Mus. Acad. Nat. Sci.

This species is somewhat similar in proportions to A. pulchellus, D. § B., which it seems to connect with the Dracontural x.

Anolis (Dracontura) du o de cim striatus, Cope. Dracontura duodecimstriata Berthold, Ueber Verschiedene neue oder seltene Amphibienarten, 1842, p. 18. D. Bertholdii Fitz., Syst. Rept. 1844. Norops macrodactylus Hallow.

Proc. Acad. Nat Sci. Phila. 1856, p. 222.

Dr. Hallowell's description was taken from specimens much decolorized by alcohol. The only differences noticeable, on comparing with Berthold's description, are, that the inferior brown band does not pass along the middle of the side, but on the borders of the ventral plates; and that the central palpebral shield is not the largest, while the whole disc is in contact with the superciliaries, with but one or two minute scales intervening.

Habitat.-New Grenada ? Surinam.

Anolis (Dracontura) a lutaceus Cope.

Size small, form elongate. Plates of the front and muzzle weakly manykeeled or smooth, those of the superciliary ridge separated medially by small scales, in number four on each side, the anterior largest and in line with two or three large scales anterior to it. Occipital plate small, irregular, widely separated from superciliaries; the latter separated by granules from the five to seven plated palpebral disc. Facial rugæ distinct, not elevated, convergent anteriorly, and enclosing a very elongate depression. Canthus rostralis straight, elongate, not prominent; nostril lateral, terminal. Rostral plate rather large, its superior border curved, and of a light color. Upper labials seven; lower, nine, the first pair (mentonnières, D. and B.) transverse, separated by a short straight median suture. Goitre of female rudimentary; of male, elongate, perhaps not very extensible. Ventral plates smooth, transversely oblong, in some specimens having a carinate appearance upon the thoracic region. Lateral scales small, gradually blending into the larger dorsal, of which there are about ten rows, weakly keeled. Scales of the external surfaces of extremities rather large, weakly one many keeled. Tail cylindrical, a little more than twice the length of head and body. Posterior extremity reaching to (3) middle, anterior, or (2) posterior part of orbit; anterior extremity two-thirds the distance to the groin. Auricular opening moderate. Total length of adult male 5 in. 3 lin.; tail, from vent, 3 in. 7 lin.; head to ear 7 lin.

Color of the adult male above, dark cinnamon brown, deeper on the head and extremities; beneath paler, thickly punctulated with brown on the throat, sides and extremities. On the head a light band crosses the anterior part of

the supraorbital region, and another extends longitudinally back from the rostral plate; there is a light triangular area upon the posterior upper labials. A dark shade upon the occiput. Posterior part of the femur pale; digits specked with lighter. In the female the colors are lighter and more varied; there are dark shades upon the dorsal region, and oftentimes on the sides of the neck.

Specimens (57371) in Mus. Smithsonian Inst., whence the Acad. Nat. Sci. has obtained examples; part of a very valuable collection made at Monte

Verde, Cuba, by Mr. Chas. Wright.

This species represents the same form as A. cyanopleurus and argenteolus, though in the nature of the scales it approaches slightly the Loysianus type. It is very easily recognized.

Anolis (Gastrotropis) le murinus Cope.

Size small; tail about twice the length of the head and body. Head short, broad, front concave, eyes very large. Occipital plate small, elliptic, separated from the granulations posterior to it by a single series of small plates, and by two series from the superciliaries. The latter are in contact on the medial frontal liue, or separated by one row of very small scales. Facial rugæ obsolete; one large scale bordering the first superciliary anteriorly, and separated from those of the canthus rostralis by a few of nearly equal size; the remaining scales of the front and muzzle are small, (less upon the latter,) polygonal, cariuate. Nostrils subterminal. Canthus rostralis very short, making an angle of 40° with the commissure of the mouth. Six loreal rows of scales, six or seven superior labials, infralabials small, keeled. Palpebrals fifteen to twenty, more or less keeled, separated from the superciliaries by small scales. A weak nuchal fold. Superior femoral and brachial scales small. Inferior lateral scales smaller than dorsal, the latter, with the superior lateral and veutral, keeled. Tail entirely cylindrical, covered with strongly keeled scales. Anterior extremity reaching the groin; posterior, extending forward to the posterior, sometimes the anterior border of the orbit. Goitre small. Total length 2 in, 10 lin.; tail 2 in. 5 lin.

Color leek-green tinged with brown anteriorly; muzzle brownish, a brown band between the eyes. A crescentic brown band upon the occiput, angularly bordered with black anteriorly, and having a median longitudinal black spot. A similar small black spot upon the nape at the confluence of two oblique pale brown bands, one from each orbit, often pale bordered inferiorly; the pale border sometimes extending to near the groin as a narrow lougitudinal band. A third small black spot upon the interscapular region. Three or four large brown spots upon the posterior part of the dorsal region. Sides and labial region varied with brown; extremities and digits obliquely banded with

the same. Belly immaculate, the reflections golden and green.

Three male specimens in Mus. Academy from Veragua, New Grenada, sent by Mr. R. W. Mitchell. A female specimen before us, from the same locality, which resembles A. Sallei, as well as this species, has a broad, dark bordered, ochraceous dorsal band, black bordered and partially embracing a pale angular area upon the occiput; a chevron-shaped brown band between the eyes; several dark lines radiating from the orbit; sides and belly immaculate; digits, goitre and labial plates black spotted; extremities immaculate, except a pale mark ou the posterior face of the thigh.

Anolis (Gastrotropis) argenteolus Cope.

Size small, form elongate. Head elongate, acute; facial rugæ obsolete, frontal concavity shallow, short. Interorbital space very narrow, orbits large. Canthus rostralis but little prominent anteriorly; nostril lateral, subterminal. Plates of the front not small, subhexagonal, smooth. Superciliary plates four or five ou each side, elongate, in close coutact on the median frontal line, separated from the small occipital. Superocular or palpebral disc more or less iso-

1861.

lated by granules, seven-plated, of which three are largest; all smooth. Loreal rows five; inferior and supralabials nine, the former bordered by one row anteriorly, posteriorly by three rows of infralabials. The "mental" plate large, in contact medially by their anterior angles only. Anricular opening large; goitre none, (probably the specimen is a female.) Dorsal scales very small, those of the lower part of the sides perhaps smaller. The exposed faces of the extremities covered with large, weakly-keeled or smooth scales. Tail without crest, covered with small scales, at intervals verticillate. Anterior extremities extending to behind the groin, posterior, to end of muzzle. Length of head to auricular opening 7 lines; from ear to vent 14 lines. Tail elongate, (mutilated.)

Above silvery gray, with four chevron-shaped brown eross-bands; a similar band upon the nape. The muzzle, occipnt, extremities and sides of the neek, are varied with pale brown, the last in a longitudinal manner. A short silvery band from inferior border of orbit to ear. Beneath white, with golden and green reflections; anal region and inferior snrfaces of femora yellow.

One specimen from Monte Verde, Cnba, sent to the Mus. Smithsonian Inst.

by Mr. Chas. Wright, (No. 57373.)

This interesting species pertains, as to its form, to the same group as cy-anopleurus, exhibiting the same elongation of head and hinder extremities; but the squamation is that of A. alligator or bullaris.

Anolis (Ctenocercus) is olepis Cope.

Allied to A. vermieulatus and angusticeps. Size small, form stout, head large, extremities short. Muzzle quite elongate, depressed anteriorly; nostrils vertical, longitudinal, their posterior border at a point marking onethird the space between the end of the muzzle and anterior border of the orbit. Anricular opening not larger than nostril. Front very plane, facial rnge not distinet, more acute anteriorly, where they converge. Canthus rostralis very prominent, straight. Superciliary ridges but little prominent, each protected by four plates. The most anterior of these is the largest, and in line with a longitudinal row of large, smooth, elongate, hexagonal shields four or five in number, the last three pair elongate and in contact. They are separated by one series of small scales from the rostral plate, and are in contact with the plates of the canthus rostralis, and with a median series of similar plates which extend to the occipital. The latter is small, and separated from the superciliaries. Palpebral disc irregular, having two or three plates much larger than the others. Loreal rows three; upper labials eight; inferior labials nine, elongate; infralabials large, faintly many-keeled, in a single series anteriorly, posteriorly in three rows. Goitre very small. The scales of the neek, body, and extremities (except the inner surfaces of the latter) are of nearly equal size, round or oval, nowhere keeled, but thickened medially. The extremities are short, the anterior reaching two-thirds way to the groin, the posterior to the shoulder. Digital expansions broad. The tails of the specimens are mutilated, except in a young male, where it is entirely cylindrical, eovered with small keeled scales distantly verticillate; its length is once and a quarter that of the head and body. Number of maxillary teeth in adult male about twentyone; of these only about twelve are tricuspidate. Teeth on the os palatinnm. In the female the head is shorter, and hence with more convergent lateral outlines. Total length, young o, 30 lin.; tail 17 lin. Length of head and body, o, 1 in. 6 lin.; head to ear 6 lin. Ditto, in Q, 1 in. 4 lin.; 5 lin.

Coloration.—Greenish glauceous blne, paler below. A narrow light line extends from npper lip to auricular opening, and in the female there are a few dots of the same color. She has also a series of indistinct dark spots on each side of the median line posteriorly. There is a purplish tinge about the jaws, which prevails upon the whole body when the epidermis is removed. A young male is ornamented with a few broad transverse bands on the back and

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tail, with crescentic marks upon the nape, as in Varanus uiloticus, and light and dark variegations upon the front and chin, (Smiths. No. 5742½.)

Specimens (adults, No. 5738) iu Mus. Smithsonian, from Monte Verde, Cuba, Mr. C. Wright discoverer; also Mns. Acad. Nat. Sciences. This interesting species resembles somewhat the form of A. (?) carolinens is, from Cuba. In specimens of that species of very small size the facial rugæ are prominent, the frontal scales much more numerous, and those of the back and belly keeled. The breadth between the orbits greater in isolepis, and the auricular aperture smaller. In the oviduet of the female was found a single large egg. Observations upon numerous species of Anolis, incline me to adopt the suggestion of Dr. Günther, viz., that but one egg at a time is impregnated and excluded.

Xiphocercus Valencienii Fitz., Syst. Rept. 1843. Anolis Valenciennii Dum. Bibr., Erp. Gen. iv. 131, 1837. Placopsis ocellata Gosse, Ann. Mag. N. H. 1850, p. 346. Anolis leucocephalus Hall., Proc. A. N. Sci. Phil. 1856, p. 228.

The genus first defined by Mr. Gosse, as above, though previously named by Fitzinger, is to be separated, in our opinion, not so much on account of the size of the plates of the front, but by reason of their curious homology with those of the plate headed Lacertidæ and Scincidæ, which is readily traced. In the tail, and nature of the dermal covering, it resembles Eupristis; in the form of the head it imitates Anolis iodurus, and opalinus most closely. It is interesting to observe that both these species, and Eupristis Edwards i, Cope, inhabit with it the island of Jamaica.

## Notes on the Ornithology of Labrador.

BY ELLIOTT COUES.

During the summer of 1860 I accompanied an expedition in charge of J. W. Dodge, Esq., which visited the coast of Labrador, in order to procure for the Smithsonian Institution specimens of the birds to be found there, together with their nests and eggs, and to study their habits during the breeding season. The late period of arrival upon the coast, which was not until the first week in July, I revented any very extensive operations in the department of Oology, while the nature of the localities visited, joined with some circumstances of a private character, rendered the formation of a large collection of birds impracticable. In the following pages, however, are embodied the results of my investigations; and though the list of the species noticed is, from my limited opportunities for observation, necessarily incomplete, it is hoped that it will not be found entirely wanting in points of interest with regard to the habits of the birds which pass the breeding season in Labrador.

A brief notice of the different localities which were visited may not be considered unnecessary. The first point reached was Sloop Harbor, a few miles south of Little Mecattina, where were collected most of the eggs procured during the voyage. Here the Somateria mollissima and the Utamania torda were the most abundant and characteristic birds, while the Larus argentatus, Uria grylle, and Mergus serrator were also very numerous, all breeding on the islands in the vicinity. On the 6th of July, the vessel left Sloop Harbor, and, passing the Murre Rocks, where the Uria lomvia was breeding in immense numbers, proceeded directly to Esquimaux Bay, where the greater part of the summer was spent. Here were collected most of the land birds procured, among them the new Aegiothus fuscescens. Zonotrichia leucophrys, and Anthus ludovicianus were very abundant; and Pinicola Canadensis and Turdus Alicia not rare. Grouse and Ptarmigan were also met with; and I was fortunately enabled to examine an extensive breeding place of the Mormon arcticus (?).

A few days were spent at Rigolet, a station of the Hudson Bay Company, in

1861.7